

Spectra of Elements Lab

Name _____

Part I. Spectra of selected elements

Sample	Spectrum					
Fluorescent lights in class	R	O	Y	G	B	V
Argon	R	O	Y	G	B	V
Chlorine	R	O	Y	G	B	V
	R	O	Y	G	B	V
Air	R	O	Y	G	B	V
Oxygen	R	O	Y	G	B	V
	R	O	Y	G	B	V
	R	O	Y	G	B	V

Part II: Identifying the vapor present in fluorescent light bulbs.

The Tube of air is like the air that surrounds you in class. It is about 80% Nitrogen N_2 and about 20 % O_2 . Draw what you think is the Nitrogen spectrum.

R	O	Y	G	B	V
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How did you figure this out?

Conclusion:

1. What elements can you identify in the fluorescent bulb?
2. How could scientists back in the day of the creation of the first periodic table and discoveries of elements look for new elements that were missing from the periodic table?
3. (How did Mendeleev and others know that there were elements missing?)
4. Describe how elements create their unique spectra. Use a drawing and words to give a full explanation.